

## Quiz 7

Consider a 2-person exchange economy. Agents A and B both have identical preferences which can be represented by  $U(x_1, x_2) = x_1 x_2$ . Person A is endowed with 2 units of  $x_1$  and 8 units of  $x_2$  while person B is endowed with 8 units of  $x_1$  and 2 units of  $x_2$ .

- a) Draw the corresponding Edgeworth box and depict the endowment point, the set of mutually preferred points, and the contract curve.

Utility maximization for the above utility function leads to demand functions of the form  $D_i(p_1, p_2, e_1, e_2) = (p_1 e_1 + p_2 e_2) / (2p_i)$ .

- b) Find the equilibrium price ratio  $p_1/p_2$ . Can you also find the exact absolute equilibrium prices  $p_1$  and  $p_2$  - why or why not?